Province of
British Columbia

Ministry of Education

Annual Report

For the period July 1, 1981
to June 30, 1982

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Province of
British Columbia
Ministry of
Education

Ministry of Education

One Hundred and Eleventh Annual Report
July 1, 1981 to June 30, 1982

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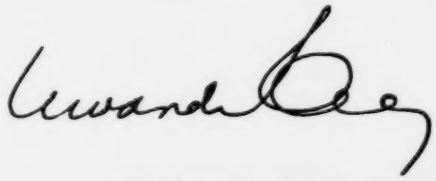
To the Honourable Henry Bell-Irving
Lieutenant-Governor of
the Province of British Columbia

May it please Your Honour:

I beg respectfully to present the One Hundred and Eleventh Annual Report of the Ministry of Education, covering the period from July 1, 1981 to June 30, 1982, on behalf of my distinguished colleague, the Honourable Brian R. D. Smith, who was Minister of Education during that period.



William N. Vander Zalm
Minister of Education

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Minister's Introduction

No single year in recent memory has offered such challenges to the Ministry of Education as 1981/82. The Ministry met those challenges with skill, dedication, and hard work. Its accomplishments, against a backdrop of global economic recession and the need for restraint on government spending, were a source of deep pride for me as Minister. By now the effects of the recession, which have struck even the strongest of the world's economies, are too well known to require elaboration. However, it is certain that fiscal problems must cast a shadow over all the Ministry's activities in 1981/82. Such matters should not diminish our recognition of the Ministry's many triumphs and innovations during this year.

After a period of careful study and development, courses in Consumer Education were prepared for introduction in the province's secondary schools in September, 1982. I have been a strong advocate of consumer education since my tour of the province in the autmn of 1980, when I talked to many students, parents, educators, and concerned citizens, who focussed my awareness on a need for these courses.

Not only does the consumer education program break new ground, but the method of its introduction was itself a landmark in the expansion of the province's communications technology. Teachers in more than 40 school districts received the curriculum orientation necessary to teach these courses through the medium of the Ministry's educational television network, KNOW (the Knowledge Network of the West). The curriculum orientation telecast used videotapes produced by the Program Implementation Branch and the Provincial Educational Media Centre and gave teachers the opportunity to obtain immediate feedback by phoning in their questions and comments to a special studio panel.

Another important addition to schools curriculum was the development of the Composition 11 course for the 1982/83 school year. This course, which may be used as one of the twelve required for graduation, was designed to help students improve their writing skills beyond English 11 and 12. It is structured in a comprehensive way so that students may choose to learn skills that emphasize academic writing or select a program that will equip them with technical or

practical writing skills. The third component of the course offers help to students who require developmental instruction in composition and writing.

Partly as a result of my tour, and partly as a result of parallel work underway in the Ministry, a complete revision of the *School Act* was begun in 1981/82. The last major revision of the act was in 1967, and many changes have taken place in education since then. In 1981/82, as a prelude to another thorough revision, the role of our education system was studied and re-examined. This study and the preparation of the new act is continuing.

Also in 1981/82, the Ministry produced interim legislation governing school taxation and finances. The development of this legislation, the *Education (Interim) Finance Act*, is covered in a special article in this report.

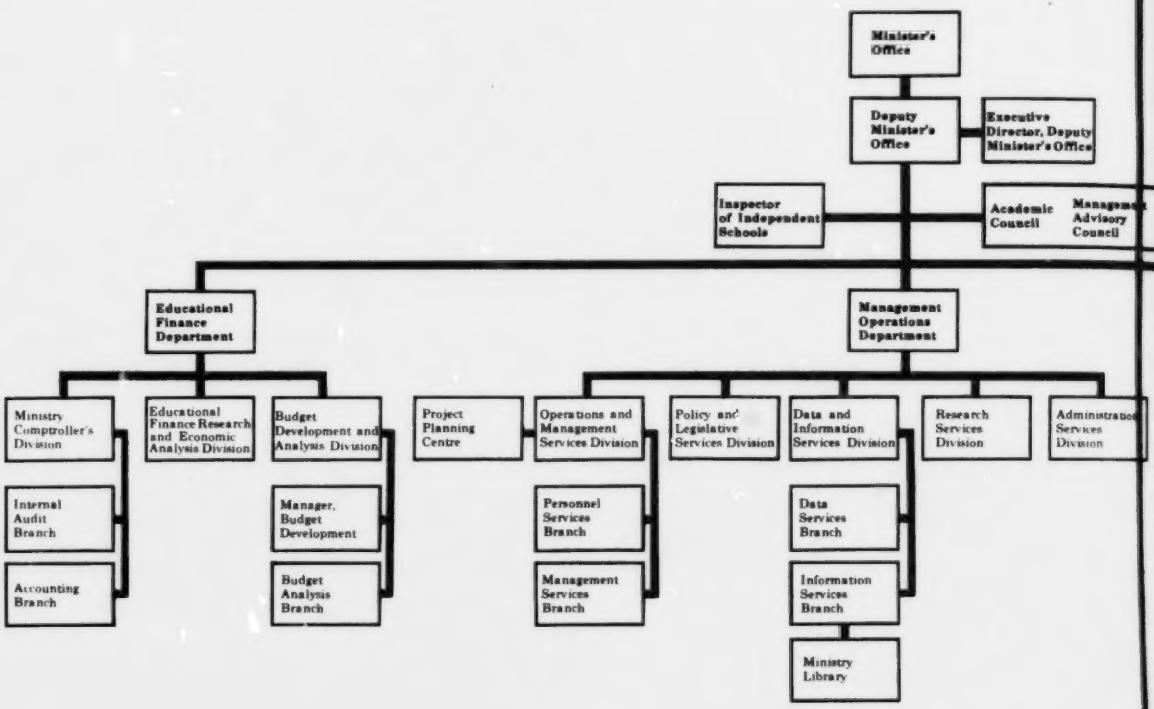
It would be difficult to mention in this introduction every highlight of the Ministry's activities. It is enough to say that the Ministry served the public well in 1981/82, and that it continued to make its full contribution to the education system's ultimate reason for existence — the provision of high-quality education to every student in every classroom in British Columbia. I thank the Ministry's staff for their commitment to that responsibility.

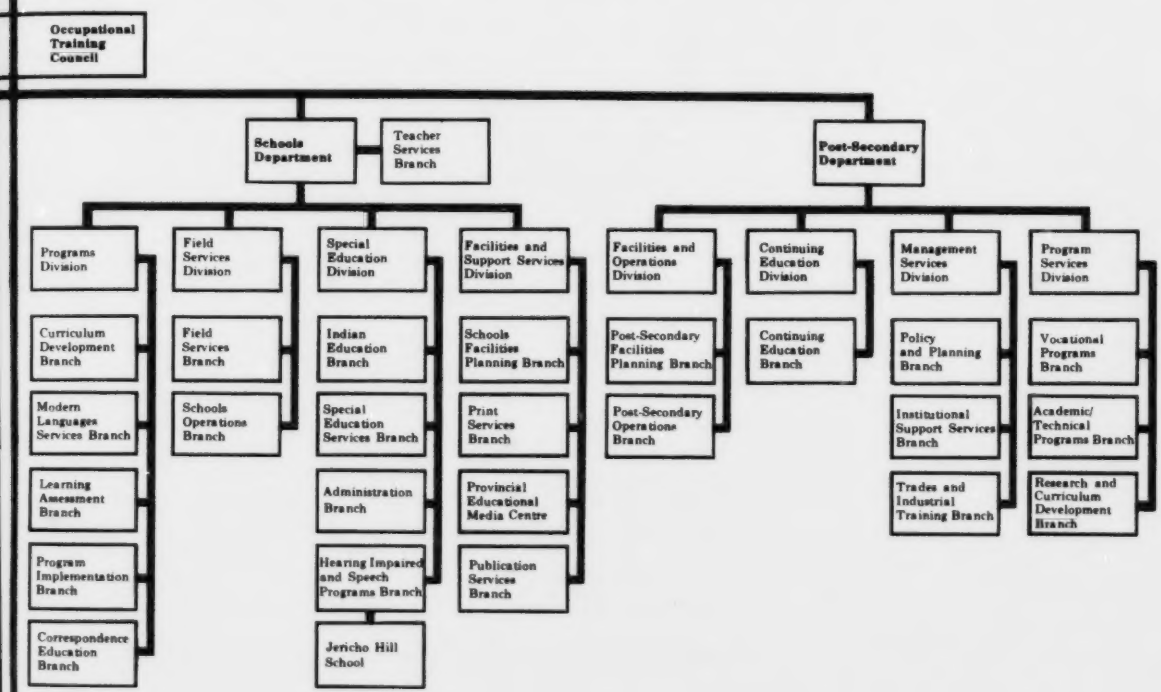
Hon. Brian R.D. Smith

(Mr. Smith was Minister of Education during the period covered by this report. He is now Minister of Energy, Mines and Petroleum Resources.)

Organization Chart

Ministry of Education
As of June 30, 1982




Occupational Training Council
Schools Department
Teacher Services Branch
Post-Secondary Department
Programs Division
Curriculum Development Branch
Modern Languages Services Branch
Learning Assessment Branch
Program Implementation Branch
Correspondence Education Branch
Field Services Division
Field Services Branch
Schools Operations Branch
Special Education Division
Indian Education Branch
Special Education Services Branch
Administration Branch
Hearing Impaired and Speech Programs Branch
Jericho Hill School
Facilities and Support Services Division
Schools Facilities Planning Branch
Print Services Branch
Provincial Educational Media Centre
Publication Services Branch
Facilities and Operations Division
Post-Secondary Facilities Planning Branch
Post-Secondary Operations Branch
Continuing Education Division
Continuing Education Branch
Management Services Division
Policy and Planning Branch
Institutional Support Services Branch
Trades and Industrial Training Branch
Program Services Division
Vocational Programs Branch
Academic/ Technical Programs Branch
Research and Curriculum Development Branch

Personnel 1981/82

Minister's Office

Minister of Education
The Honourable Brian R. D. Smith, B.A., M.A., LL.B.

Deputy Minister's Office

Deputy Minister of Education
R. J. Carter, B.A., M.Ed.

Assistant Deputy Minister
Schools Department
G. G. Wall, B.A., B.P.E., M.Ed.

Assistant Deputy Minister
Post-Secondary Department
G. L. Fisher, B.Sc., M.Sc., Ph.D.

Assistant Deputy Minister
Management Operations Department
C. Daneliuk, B.A., M.Ed.

Assistant Deputy Minister
Educational Finance Department
J. R. Fleming, B.A.

Executive Director
Deputy Minister's Office
J. L. Canty, B.A., M.Ed.

Schools Department

Division of School Programs

Executive Director, Programs
J. J. Mussio, B.Sc., M.A., Ph.D.

Director, Curriculum Development
R. M. Overgaard, B.A., M.Ed.

Assistant Director, Curriculum Development
I. J. Cameron, B.Ed., M.Ed., Ed.D.

Assistant Director, Curriculum Development
W. D. Oliver, B.A.

Assistant Director, Career Programs
J. Jupp

Director, Modern Languages Services
G. Mills, B.Ed., Ph.D.

Director, Learning Assessment
H. J. Matheson, B.A., M.A., Ed.D.

Assistant Director, Program Assessment
D. J. Bateson, B.Ed., M.Sc., Ed.D.

Assistant Director, Scholarship and
Student Assessment
Alan R. Taylor, B.Sc., M.Ed.

Director, Program Implementation
B. D. Buchanan, B.Ed., M.Ed.

Director, Correspondence Education
W. B. Naylor B.A., M.Ed.

Division of Field Services

Executive Director, Field Services
A. J. H. Newberry, B.A., M.Ed., Ed.D.

Director, Schools Operations
K. C. Starling

Director, Field Services
D. R. Smyth, B.P.E.

Assistant Director, School Accreditation
P. D. McMuldroch, B.A., M.Ed.

Co-ordinator, Professional Development
D. N. Newman, B.A., B.Ed., M.Ed.

Co-ordinator, Administration
Robert B. Taylor, B.Sc., M.Ed.

Division of Special Education

Executive Director, Special Education
W. J. Desharnais, B.A., M.Ed.

Director, Indian Education
S. E. Arbess, B.A., M.Ed., M.A., Ph.D.

Director, Special Education Services
J. Lee, B.A., M.A., Ph.D.

Co-ordinator, Learning Assistance and Learning Disabilities
D. Chapman, B.A., B.Ed.

Co-ordinator, Visually Impaired
E. Y. P. Lau, B.A., M.Ed.

Co-ordinator, Mentally and Physically Handicapped
G. Cameron, B.Ed., M.Ed.

Director, Administration
M. Epstein, B.A., M.A.

Director, Hearing Impaired and Speech Programs
H. Minto, B.Ed., M.Ed.

Co-ordinator, Hearing Impaired and Speech Programs
L. McLaughlin, B.Ed., M.Ed., Dip. Deaf Educ.

Principal, Jericho Hill School for the Deaf
H. I. Adams, B.A., Dip. Deaf Educ.

Vice Principal, Jericho Hill School for the Deaf
N. E. Miller, B.A., M.A.

Division of Facilities and Support Services

Executive Director, Facilities and Support Services
J. L. Doyle, B.A., M.Ed.

Director, Schools Facilities Planning
T. G. Ellwood, B.Ed., M.Ed.

Director, Publication Services
P. J. Northover, B.A., B.Comm., M.B.A.

Assistant Director, Operations
R. L. Connolly, B.A., Dip. Public Admin.

Assistant Director, Purchasing and Client Relations
A. C. Toutant, B.Ed., M.A.

Director, Provincial Educational Media Centre
B. A. Black, B.Ed.

Assistant Director, Provincial Educational Media Centre
W. L. Groutage, B.A.

Production Director
John Wright, B.A., M.A.

Director, Print Services
T. F. Wrinkle, B.A., M.A.

Teacher Services Branch

Director, Teacher Services
B. A. Andrews, B.A., M.A., Ph.D.

Assistant Director, Teacher Services
E. D. Cherrington, B.A., Dip. Ed., Dip. Public Admin.

Independent Schools

Inspector of Independent Schools
E. L. Bullen, B.A., M.A., Ph.D.

Post-Secondary Department

Division of Program Services

Executive Director, Program Services
L. J. Thompson, B.A., B.Sc., F.C.I.S.

Director, Vocational Programs
D. R. MacRae, B.Sc.

Director, Academic and Technical Programs
T. H. Clement, B.Sc., M.Ed., Ph.D.

Director, Research and Curriculum Development
W. G. Davenport, B.Sc., Ph.D.

Division of Management Services

Executive Director, Management Services
J. F. Newberry, B.Ed., M.Ed., Ph.D.

Director, Policy and Planning
K. A. MacIver, B.A.

Director, Institutional Support Services
R. C. McCandless, B.A., M.P.A.

Director, Trades and Industrial Training
J. D. Meredith

Co-ordinator, Student Services
D. L. Clarke, B.A., M.Sc.

Co-ordinator, Data Systems
Dorothy Drislane, B.Sc.

Division of Continuing Education

Executive Director, Continuing Education
R. L. Faris, B.A., M.Ed., Ph.D.

Director, Continuing Education
N. Rubidge, B.Sc., M.Sc., Ed.D.

Co-ordinator, Continuing Education
S. R. Harvey, B.A., B.Ed.

Division of Post-Secondary Facilities and Operations

Executive Director,
Post-Secondary Facilities and Operations
H. L. McIntyre, B.Arch., F.R.I.B.A.

Director, Post-Secondary Facilities Planning
G. Shuttleworth

Director, Post-Secondary Operations
D. S. Adams, C.G.A.

Management Operations Department

Division of Operations and Management Services

Executive Director,
Operations and Management Services
B. R. Stoodley, C.A., R.I.A.

Director, Management Services
M. A. Rhodes, B.A., M.P.A.

Director, Personnel Services
J. A. Holmes, Dip. Public Admin.

Assistant Director, Personnel Services
V. Henry, C.D., B.A.

Division of Administration Services

Executive Director, Administration
W. L. B. Hawker, B.A., B.Ed.

Division of Policy and Legislative Services

Executive Director, Policy and Legislative Services
J. Walsh, B.Sc., M.Ed.

Division of Data and Information Services

Executive Director, Data and Information Services
R. N. Greer, B.A., M.A., Ed.D.

Director, Data Services
D. Rees, B.A., M.A.

Director, Information Services
D. Melville

Educational Finance Department

Division of Educational Finance Research and Economic Analysis

Executive Director,
Educational Finance Research and
Economic Analysis
B. D. Anderson, B.Ed., M.Ed., Ph.D.

Division of the Ministry Comptroller

Ministry Comptroller
G. E. Wilcox, C.G.A.

Director, Internal Audit
G. Gamble, R.I.A.

Director, Accounting
S. W. Woodward, Dip. Bus. Admin., R.I.A.

Division of Budget Development and Analysis

Acting Executive Director,
Budget Development and Analysis
D. L. Hartwig, B.A.

Manager, Budget Development
D. F. Hughes, Dip. Public Admin.

District Superintendents of Schools

T. Good, B.A., M.Ed., Central Coast

C. Hopper, B.Ed., M.Ed., Gulf Islands

W. B. Johnston, B.Ed., M.Ed., Summerland

N. Keis, B.S.A., M.Ed., Princeton

M. Roscoe, B.A., M.A., Keremeos

Promotions and Appointments

L. J. Thompson, Executive Director,
Post-Secondary Program Services

H. I. Adams, Principal,
Jericho Hill School

B. D. Buchanan, Director,
Program Implementation

J. Lee, Director,
Special Education Services

H. J. Matheson, Director,
Learning Assessment

D. Melville, Director,
Information Services

G. Mills, Director,
Modern Languages Services

R. M. Overgaard, Director,
Curriculum Development

D. W. Rees, Director,
Data Services

M. A. Rhodes, Director,
Management Services

S. W. Woodward, Director,
Accounting

I. J. Cameron, Assistant Director,
Curriculum Development

A. C. Toutant, Assistant Director,
Purchasing and Client Relations

R. J. Parker, Senior Project Manager,
(Post-Secondary)

J. H. Wright, Production Manager,
Provincial Educational Media Centre

G. Cameron, Co-ordinator,
Mentally and Physically Handicapped

L. McLaughlin, Co-ordinator,
Hearing Impaired and Speech Programs

Awards and Achievements

25-Year Continuous Service Certificate

S. Yasui

D. F. Hughes

H. F. G. Kent

35-Year Continuous Service Certificate

A. P. Halsall

Executive Development Training Plan Graduate

L. A. Rudosky

Retirements

A. P. Halsall, Teacher,
Jericho Hill School, 35 years

V. M. Kingsley, Clerk-Stenographer,
Schools Department, 33 years

G. H. Bayer, Teacher,
Jericho Hill School, 27 years

A. E. Darwood, Child Care Counsellor,
Jericho Hill School, 27 years

J. Jupp, Assistant Director, Career Programs, 18 years

M. C. Hamilton, Teacher,
Jericho Hill School, 14 years

W. W. Baldry,
District Superintendent of Schools, 11 years

B. A. Close, Custodial Attendant,
Jericho Hill School, 6 years

Deceased

P. A. McDonald, Clerk 4

Schools Department

The four divisions of the Schools Department are at the heart of the public education system. They are responsible for the overall direction and the administration of the system, ensuring the high quality and delivery of all school programs. About a half million students from kindergarten to Grade 12 and more than 29,000 full-time equivalent teachers came under the Schools Department's jurisdiction in 1981/82.

In addition to handling its formidable day-to-day workload, the department completed a number of special tasks in 1981/82. It established two regional Educational Support Centres for children with severe learning disabilities, planned an innovative consumer education course to be launched in September 1982, pioneered the use of television as a tool in curriculum orientation, and awarded nearly 1,000 provincial scholarships.

Division of School Programs

This division develops and implements curriculum and assesses student learning for all students to the Grade 12 level. It also administers Modern Languages Services, Career Preparation Programs, Correspondence Education, and Scholarship Examinations.

Curriculum Development Branch

This branch's main purpose is to improve the province's educational programs. Several revised courses and new learning resources were implemented in 1981/82.

A number of new textbooks were introduced in the areas of elementary language arts (language and spelling texts, novels, and dictionaries) and secondary English (writing texts and prose and drama anthologies). A resource book was published for teachers of English as a Second Language. Physics 11 and 12, the secondary physical education program, elementary science, Writing 11, and mathematics were among the courses and subject areas that received new resource materials.

Consumer Education 9/10, a course that had been promised by Minister of Education Brian Smith after his

1980 educational tour of the province, was developed by the branch for inauguration in September, 1982. Consumer Education 12 will be introduced in September, 1983. Composition 11, an additional course in practical writing, was also developed for the 1982/83 school year.

Learning Assessment Branch

This branch has two main sections, the Program Assessment Section and the Scholarship and Student Assessment Programs Section. The Program Assessment Section assesses student achievement and teacher attitudes. These assessments provide objective measures of the quality of education throughout the province.

A major, continuing activity of this section is to make available to teachers the Classroom Achievement Tests, a set of 25 optional tests, which are based on the provincial curriculum and which give teachers a benchmark for measuring student performance. Nearly a half million copies of the tests were ordered in 1981/82.

The branch also holds annual regional meetings to disseminate assessment information and publicize new educational products. During 1981/82, branch personnel gave more than 60 workshops attended by teachers and administrators. The most popular one, "Grading Practices," attracted more than 1,000 participants. To fulfill its regular tasks, the branch works closely with the Curriculum Development Branch; in 1981/82, for instance, it helped revise report cards and permanent record cards.

In 1981/82, the Program Assessment Section also took part in a number of special assessment projects. Two exhaustive, province-wide assessments were conducted, one of mathematics (involving about 90,000 Grades 4, 8, 10, and 12 students) and another of science (in which more than 86,000 students and 2,903 teachers took part). Assessments in these areas had last been made in 1977 and 1978.

In addition, the Program Assessment Section also took part in the "Evaluation of Educational Achievement Study in Mathematics," a Swedish-based comparison of mathematics teaching and learning in 18 nations. About 100 British Columbia Grade 8 and Grade 12 mathematics

classes participated. The British Columbia results have been published although the international study is still in progress.

The Program Assessment Section took part in a nation-wide study of science education. The study, co-ordinated by the Science Council of Canada, was based on a questionnaire that dealt with teacher training and attitudes, the availability of labs, courses offered, curriculum content, texts, and other facets of science programs. Teachers — 984 of them in this province — were invited to indicate what is being taught and to state what they feel should be taught in science classes. Preliminary results are now available; cross-Canada results will be made public in June, 1983.

The other main section of the Learning Assessment Branch, the Scholarship and Student Assessment Programs Section, administers the Grade 12 scholarship program, provides a transcript service for secondary school graduates as far back as 1890, evaluates out-of-province secondary school education levels, and operates the General Education Development (GED) test program.

The American-developed GED program — six hours of written tests held over a two-day period — is administered through colleges and institutes for adults seeking high school equivalency certificates. In 1981/82, British Columbia continued to lead Canada in successful GED candidates; 6,584 applied to write the series of five tests, and 4,370 passed.

During the 1981/82 school year, 994 students earned Provincial Scholarships worth $1,000 each; the top 20 candidates receive $2,000. Qualifying students must pass an English composition and three specialty examinations and must enrol in a post-secondary institution. The number of examination papers submitted totalled 17,215 — 7.89 per cent more than in the previous year. Daniel Treisman, a student of Prince of Wales Secondary School, Vancouver, won the Governor-General's Silver Medal for the highest average, 94.65 per cent, while the Governor-General's Bronze Medal for second place was awarded to Samir Shah of North Delta Senior Secondary School, whose marks averaged 94.49 per cent.

The Ministry also gave 360 District Awards of $500 each to 360 vocationally oriented students, again with the requirement that recipients must pursue post-secondary studies.

Program Implementation Branch

During 1981/82, several programs were revised or introduced: Consumer Education 9/10, Composition 11, English as a Second Language/Dialect, Enrichment and Gifted Education, Physics 11, Physical Education 8-11, Science 1-7, and Writing 11. This four-year-old branch implemented these new or revised programs through province-wide meetings that had substantially increased attendance over 1980/81 (300 per cent more teachers).

Curriculum implementation workshops, operated by four co-ordinators assisted by outstanding local teachers seconded with the co-operation of the school districts, more than doubled in number, from 25 to 60. Participants included school administrators, district supervisory personnel, and teachers from public and independent schools. Faculty of Education staff from the province's three universities were also invited to these sessions.

The Program Implementation Branch also pioneered the delivery of curriculum orientation to classroom teachers via the Ministry's Knowledge Network of the West (KNOW). The subject was the new consumer education studies, scheduled to begin in September 1982. Four videotapes, produced for KNOW by the Program Implementation Branch and the Provincial Educational Media Centre, were shown to viewers in more than 40 school districts. Then viewers were invited to phone their questions and comments to the studio guests — teachers, students, and experts from the legal and business communities.

In May the branch held its third annual institute for the administrators who plan and evaluate program implementation. This institute was attended by about 100 people. Then, over the summer, the Program Implementation Branch held a five-day summer institute on the teaching of written expression. The institute, conducted by Richmond School District resource teachers,

and attended by 44 teachers from 27 of the province's smaller school districts, used videotapes produced by PEMC to illustrate teaching methods that would improve the work of young writers in elementary schools.

The Provincial Curriculum Resource Centre, established in the autumn of 1981, proved to be another remarkable success for the Program Implementation Branch. The centre houses items such as books, tapes, charts, and guides developed for special local needs beyond the provincial curriculum. The items are listed in a catalogue to be updated yearly. This centre enables schools in all districts to examine and benefit from the courses developed in any school district — both a cost-saving and stimulative approach. By the end of the 1981/82 year, the centre had collected about 1,500 items from 59 school districts and was receiving an average of 25 requests per day.

Modern Languages Services Branch

Sharp increases in enrolment in French-language courses were a highlight of the Modern Languages Services Branch in 1981/82. The branch's jurisdiction was expanded to include curriculum development, implementation and in-service activities in French (and other modern languages such as German and Spanish), English as a Second Language, heritage languages, and multiculturalism.

Enrolment in the *programme-cadre de Français* (instruction in French for Francophones) rose to 844 students from 659 in 1980/81 and from 213 in 1979/80. As its name suggests, the program parallels the English-language curriculum but is given in French to Francophone children. Eighteen school districts offered the program in 1981/82, and two districts planned to begin secondary programs in September, 1982.

The popularity of French immersion increased dramatically at the elementary level, but secondary enrolment was unchanged. Enrolment in the program's three levels was 5,577 for early immersion (beginning in kindergarten or Grade 1), 343 for late immersion (beginning in Grade 6), and 400 for secondary immersion (beginning in Grade 8). The goal is to produce high school graduates who are fluent

enough for government or business employment that requires bilingualism, or are able to take post-secondary education in French.

A Ministry committee of teachers and co-ordinators totally revised the French reading and literature program from Grades 8 to 12, and an annotated anthology of representative French-Canadian and other French-language readings were produced for use in 1983. About 95,000 students enrolled in secondary French programs, most of which are federally supported through grants and bursaries. At the same time, division committees worked on a resource book for senior high school German and on a badly needed new curriculum for Spanish.

The branch also held workshops and offered in-service activities for teachers and resource people, provided a consulting and advisory service, produced several lists and handbooks, and named a co-ordinator for English as a Second Language to meet growing needs in that area.

Correspondence Education Branch

School-age students isolated from regular school attendance by distance or illness, students in (usually small) secondary schools wanting courses unavailable at their school, and adults upgrading their education get their schooling "delivered" to them by the Correspondence Education Branch. And there are quite a number of them: about 22,000 secondary school students and about 3,000 adults in 1981/82, approximately the same number as in the previous year.

The nature of its work brings this branch into close contact with other Ministry branches, especially the Print Services Branch, which edits, graphically designs, and prints many of its course materials, the Publication Services Branch, which stores and distributes them, and the Provincial Educational Media Centre, which produces supporting media material.

The Correspondence Education Branch also shares projects with other provincial correspondence branches. One such project is the new correspondence program for teaching English as a Second Language. Interprovincial co-operation

in the development of this program greatly reduced costs. Similar savings have been made in another, more limited project undertaken in co-operation with the Ontario Correspondence Education Branch. The significant cost savings point to the desirability of expanding such co-operative efforts.

Division of Field Services

This division has a wide range of important ties with the province's 75 school districts. It provides support services for and supervision of senior district administrators, handles school assessment and accreditation, determines provincial grants to the districts, and reviews district school budgets. It consists of two branches: Field Services and Schools Operations.

Field Services Branch

This branch acts as a vital communication link between the Ministry and school districts — a heavy responsibility in a year marked by the requirements of restraint. It also plays an active role in the orientation of new superintendents and secretary-treasurers and in the evaluation of teachers and supervisory personnel. Several districts made use of the branch's Superintendent Professional Selection Service to hire their superintendents. The transition from provincially to locally appointed superintendents began in the mid-1970s, and all but five of the 75 districts had chosen their own superintendent by the end of the 1981/82 school year.

The School Accreditation Section of the Field Services Branch studied 39 secondary schools in 1981/82. Accreditation procedures require such schools to conduct an internal evaluation to measure themselves against provincial standards. An external evaluation is then conducted by a visiting team of principals, superintendents, and other senior officials. Elementary schools follow a modified version of this process but without the provincial, external evaluation team.

The Professional Development Section of the branch gives senior district administrators guidance on leadership and

management techniques and on emerging education issues. In 1981/82, it co-operated in nine workshops for district administrators and seven workshops for principals, including one on the use of microcomputers in education. This section also shared in the production of a helpful handbook written by and for principals of small secondary schools, many of them working in remote areas and new to the role of principal.

Schools Operations Branch

This new branch, which took over some major functions of the Schools Finance Branch, only became fully operational in June, 1982. It is developing a computer system to monitor capital project funding approvals. The branch also plays an important role in equitably distributing funds for education and in developing operational management support systems.

Division of Special Education

The Division of Special Education, with its three subsidiary branches (the Special Education Services Branch, the Hearing Impaired and Speech Program Branch, and the Indian Education Branch), develops, implements, and administers educational programs for exceptional children. Specifically, this mandate involves the division in developing curriculum and teacher resource guides, sponsoring workshops and conferences for parents and teachers of exceptional children, advising various councils and committees whose decisions affect exceptional children, and co-operating with other ministries to provide auditory training equipment, school health services, speech pathology services, and programs for pre-school handicapped children. To support the education of exceptional children across B.C., the division allocates funds to school districts through a device known as the special approval — valued at $33,016 in 1981/82, compared with $26,160 in the previous year. During 1981/82, more than 3,300 special approvals were granted in the following areas.

AREAS	APPROVALS
Elementary Learning Assistance (K-7)	893.0
Secondary Learning Assistance	493.5
Severe Learning Disabled	201.5
Educable Mentally Handicapped	237.1
Trainable Mentally Handicapped	153.9
Severe-Profound Mentally Handicapped	50.0
Hospital-Homebound	91.0
Physically Handicapped	42.5
Residential	10.5
Visually Impaired	66.8
Hearing Impaired	95.7
Autistic	38.5
Severe Behavior Problems	126.5
Rehabilitation	152.5
Climate and Distance - Specialized	40.0
Job Training for Moderately and Severely Handicapped	31.5
English as a Second Language	299.5
Indian Education	180.0
Speech Pathology	158.0
	3,362.0

The division, assisted by the Ministry of Health's Division of Speech and Hearing, continued to underwrite the costs to school districts of obtaining auditory training equipment and operating speech therapy programs. It also continued to co-operate with the Corrections Branch of the Ministry of Attorney General by paying for educational programs in the province's Youth Containment Centres. During the 1981/82 school year, there were 116,261 students who were either enrolled in special programs or who received some sort of special education service. A professional and support staff of 4,610 took part in the delivery of these programs.

Indian Education Branch

This branch not only provides education services to Indian students but continues to offer native language and cultural study programs for the benefit of all the province's children. In 1981/82, about 50 special program approvals of these study programs were made, making them available in almost every cultural-linguistic area of British Columbia.

The branch is concerned with every aspect of Indian students' education. Native language and culture programs are offered in 51 school districts, with the assistance of native para-professionals and in consultation with the Indian community.

An advisory council on Indian Education has been formed to advise the branch on policy and programs in Indian education. Most of the council's ten members are Indians involved in education. In 1981/82, the Indian Development Education Assistance (IDEA) fund was established to fund research and development in this field.

During the past year, the branch began work on a series of contributions to the study of Indian education with the publication of *New Strategies in Indian Education: Utilizing the Indian Child's Advantages in the Elementary Classroom.* It also released through the Provincial Educational Media Centre a 30-minute videotape on the work of Haida artist Robert Davidson. This was the first in what will be a series of videotapes on West Coast Indian art. Another videotape on visual instruction techniques, entitled *Telling Our Stories,* was released as well.

Special Education Services Branch

During 1981/82, the Special Education Services Branch undertook curriculum development work specifically directed towards aiding the hearing impaired and learning disabled. Accordingly, this branch contributed to the two Regional Educational Support Centres established in September, 1981 for children with severe learning disabilities. Planning for two more centres was suspended because of restraints on government spending.

This year the branch consulted with the Project Review Committee regarding the use of microcomputers by special needs students. It began work on a method for evaluating special education programs, started a *Guide for Parents of Special Needs Students*, and initiated a resource book on ways to integrate special needs students into a regular class setting. Interested parent groups were encouraged to help in the integration process.

In 1981/82, this branch assisted 61 school districts with programs for disabled students. Three co-ordinators were appointed to help develop the programs for special needs students: one for learning assistance/learning disabilities programs, one for programs for the mentally and physically handicapped, one for enrichment and gifted programs. Eleven handicapped students with no schooling or inappropriate schooling were referred to the appropriate co-ordinator. The enrichment and gifted programs were supplemented by the publication of the *Enrichment and Gifted Education Resource Book* in the autumn of 1981 and by a provincial workshop on the gifted held in March.

The work of this branch also helped about 500 visually impaired students who attended B.C. public schools in 1981/82. Approximately 100 of those students in 29 school districts received orientation and mobility instruction under a Ministry-funded contract with the Canadian National Institute for the Blind. At least 27 students were provided with an opportunity to study Braille and the Provincial Resource Centre for the Visually Impaired acquired 2,484 Braille books and 6,249 talking books during the year (its resources are also available to the visually impaired in colleges and institutes). In addition, B.C. deaf and blind children got support and services both within the province's school district programs and at the W. Ross MacDonald School in Brantford, Ontario.

Hearing Impaired and Speech Program Branch

This branch, established in 1981, co-ordinates all school district programs for hearing impaired children in the

province and administers the Jericho Hill Provincial School for the Deaf, in Vancouver.

The Hearing Impaired and Speech Program Branch also co-ordinated programs for the hearing impaired in 48 school districts, supported by provincial special approvals of approximately $3,160,000. A total of 1,295 students were educated by teachers of the hearing impaired through special education services. This branch also supported speech services for about 15,000 students in 65 school districts.

Jericho Hill School

This well-known school taught 160 students in 1981/82; 56 were provided with residential accommodation. The school's staff ran integrated classes for 28 deaf secondary students at Kitsilano Secondary School and worked to obtain computer-assisted instruction programs for deaf children. In addition, the University of British Columbia and Jericho Hill School will continue the practicum placement program for education students specializing as teachers of the hearing impaired. Assistance was given to Joint Educational Management (JEM) Research in developing a program to help with the speech problems of the hearing impaired.

Division of Facilities and Support Services

The Division of Facilities and Support Services is a newly established division. It was created through Ministry reorganization that regrouped several existing branches: Facilities Services, Print Services, the Provincial Educational Media Centre, and Publication Services. The division was established March 1, 1982 and was to become fully operational on September 1, 1982.

This division is responsible for meeting the material requirements of our public schools, namely providing school buildings and equipment. Its role is to produce the budgets for building and equipping schools, to provide for the editing, design, printing, and production of learning materials, and to manage the system for distributing these materials.

Schools Facilities Planning Branch

In 1981/82, this branch's development of capital projects was restricted by the economic downturn and resulting restraints on government spending. Activity was affected by the need for more stringent budgeting, and a number of projects were deferred in the final months of the fiscal year, although 495 building projects did receive approval during 1981/82. Following is a list of Ministry expenditures on these projects.

Expenditures, 1981/82	
Sites	$ 18,535,841
Construction	111,086,377
Equipment	10,672,440
Fees and Contingencies	11,980,421
Transportation	3,579,836
	$155,854,915

Projections for the near future allow for some growth in elementary school requirements and for an increase in the upgrading and modernization of aging schools and equipment.

During the year, the branch introduced Part IV of the seven-part *B.C. School Facilities Manual*, which is replacing the *B.C. School Building Manual*.

Print Services Branch

Print Services continues to provide a complete range of specialized publishing services to all the program divisions of the Ministry of Education. Over the past year, Ministry publishing demands have required Print Services to deal with a wider range and greater volume of material than ever before. In the area of manuscript editing and designing, a greater level of expertise was built up to assist in the development and revision, not only of Ministry policy publications (e.g., the *Administrative Handbook for Elementary and Secondary Schools*), but also of

information/reference books for educators (e.g., *Guidelines for Planning Program Implementation* or *Assessing Your School*) and learning materials for direct classroom use (e.g., the *Physics 12 Student Laboratory Manual*). Other publications that required expert editorial and design input included the *Elementary French as a Second Language Curriculum Guide*, the *Elementary Science Curriculum Guide*, *Plumbing: Manual of Instruction for the Plumbing Trade*, the Career Preparation Program introductory materials, and the *Resource Kit for the 1980 Physical Education Curriculum*.

At the same time, the production unit of Print Services saw a steady increase in the volume of camera-ready and utility printing it handled. Although several million impressions were produced, mechanical efficiency of the unit was maintained. The introduction of word processing equipment also enabled typesetters to deal with the increased editorial input and opened up the possibility of reducing turnaround times on priority projects (e.g., *Guidelines for Planning Program Implementation* was brought from the edited manuscript to camera-ready copy within a week).

Provincial Educational Media Centre

The Provincial Educational Media Centre, (PEMC) located in Richmond, is responsible for the selection, acquisition, development, production, and distribution of non-print media materials for the province's schools, colleges, and institutes. The non-print material includes videotapes, audiotapes, films, and multi-media kits, which PEMC either purchases from non-profit organizations or produces itself. PEMC also puts out its own calendars and catalogues (e.g., the evaluation catalogue, a type of "consumer's guide" to help school boards select the learning materials that they need), as well as the print supplements to some of its media productions (e.g., music booklets or the texts for the audio, French-language instruction programs).

In 1981/82, the media centre extended its services to include microcomputer courseware. PEMC's microcomputer courseware system is the first of its kind in Canada and complements the unit's existing video and audiotape

services. The diskettes PEMC produces are offered for use in schools that have microcomputers (on a cost-recoverable basis as are other PEMC materials).

PEMC's activities in 1981/82 supported curriculum changes that were made in Elementary Social Studies, Secondary English, Fine Arts, and Physics. In co-operation with the Program Implementation Services Branch, PEMC also produced materials to help teachers of English as a Second Language, Written Expression, and Consumer Education. The Consumer Education programs were broadcast on the Knowledge Network of the West (KNOW) in a successful test of that system's effectiveness in reaching and informing teachers.

In a year of fiscal restraint, PEMC saved money for school districts and colleges by making bulk purchases of blank videotapes, microcomputer diskettes, and National Film Board Films.

Publication Services Branch

The operation of this large branch is complex. In 1981/82, Publication Services purchased textbooks, instructional books, audio-visual material, correspondence coursework, and vocational educational material worth about $12 million for distribution to public and independent schools from its large warehouse in Esquimalt. This distribution operation made the branch among the biggest shippers on Vancouver Island. The branch's warehouse stocks about 2,000 titles and carries a $5 million inventory. The combined weight of the books and other instructional material shipped by the branch during the year was about two million kilograms (4.4 million pounds). Since 95 per cent of distribution is off-shelf, delivery time usually can be held to one week, except during the three-month peak shipping period in the summer.

During 1981/82, Publication Services sent out some 24,000 correspondence courses to 20,000 students, including 2,000 who live outside the province, many of them overseas. The branch also administered the School Library Book Purchase Plan, which distributes free to every school library a selection of books written and published in British

Columbia. In 1981/82, these books were valued at about $125,000. For all this volume of work, the branch has a staff of 21.

A major step forward this year for the branch was the acquisition of a state-of-the-art computer with six terminals. The computer has performed flawlessly and has dramatically improved service, allowing staff to give answers almost instantly to phone questions concerning orders, back orders, accounts, etc. Efficiency has been raised by an estimated 20 to 40 per cent from the level of efficiency that existed under the previous shared-computer arrangement.

Teacher Services Branch

The Teacher Services Branch provides an important service link with the field. In the 1981/82 school year, the branch responded to some 30,000 requests, issued 3,754 teachers' certificates of different kinds, and conducted some 7,000 evaluations of credentials. The Certification Advisory Committee heard 23 appeals of the branch's evaluations.

During the reporting period, the branch received approval of its guidelines for the evaluation of out-of-province applications and its major review of the effectiveness of appeal processes. Changes were made in the composition of Review Commissions and in the procedures followed by Transfer Review Committees.

The international and interprovincial teacher exchange program continued to be popular; 115 applications for exchange appointments were received, and a record 63 matchings were achieved — more than in any year since the exchange program began in 1922. Twenty-five of the exchanges were with Great Britain and Ireland, twenty-two were with Australia, four were with the United States, one each took place with France and Sweden, seven were with Ontario, and three were with Quebec.

The branch finished converting the manual and microfilm system of teacher records to a microfiche system with a comfiche index. Studies were also undertaken to determine the feasibility of computerizing the teacher record system.

Independent Schools

Administrators representing the three largest groups of publicly supported independent schools in B.C. joined thirty senior public school administrators for a four-day seminar at the University of British Columbia in August, 1981. The ensuing discussion on matters of common educational concern demonstrated that there is a trend toward closer professional contact between the two systems — to the benefit of all the province's schools.

Since independent schools first became eligible for Ministry of Education grants in 1978/79, student enrolment and the number of teachers who work in these schools have both grown steadily. In the 1981/82 academic year, 124 schools with 21,858 students and 1,531 teachers qualified for support under the terms of the *School Support (Independent) Act*. This represents an increase over the number that had qualified in 1980/81 of nine schools (7.8 per cent), 2,234 students (11.4 per cent), and 115 teachers (8.1 per cent). However, the 1981/82 enrolment figure includes transfer students who attended the same school for less than the full school year; until the act was amended in 1981, these partial students had not been counted in the calculation of support grants, so the actual increase in enrolment was 8.08 per cent.

Two categories of independent schools qualify for grants. Category 1 includes schools that have existed for at least three consecutive years, have adequate facilities, and whose staff members do not teach or practise doctrines of racial superiority, religious intolerance, or violent social change. In 1982, six schools qualified for Group 1 grants averaging $237 per student. This dollar figure represents 8.8 per cent of the average per-pupil operating costs incurred by the public school district where the independent schools are located. Category 2 includes schools that meet these same requirements and also fulfill a number of other criteria related to curriculum, pupil-testing programs, external evaluation, learning assessment programs, and teacher certification. In 1982, 118 independent schools qualified for Group 2 grants averaging $790 per pupil. This dollar figure represents 29.34 per cent of the average per-pupil operating costs incurred in 1981 by the public school district where the independent schools are located. Grants for

the year to both categories totalled $16,932,342, payable to the schools in 1982/83.

Figures for 1981/82 also show that the percentage of independent school teachers who hold B.C. teaching certificates issued under the *School Act* has risen from 41.5 per cent in 1977/78 to 57 per cent. Over the same period, the percentage of teachers certified under the *School Support (Independent) Act* dropped from 58.4 per cent to 43 per cent. In addition, the figures show that there has been a decline of almost 4 per cent (from 12 per cent to 8.1 per cent) in the number of teachers certified under the 10-year clause — that is, the clause certifying teachers who had taught in independent schools for 10 years or more without certification before the grant system began. The number of teachers holding one-year Permits to Teach declined too, from 2.5 per cent to 1.2 per cent between the 1977/78 and 1981/82 academic years.

In order to reinforce this trend towards a more universal standard of certification, the Independent Schools Teacher Certification Committee, (consisting of three members and chaired by a former district superintendent of schools) decided this year to recommend that the minimum requirements for an Independent Schools Teaching Certificate be raised. Effective September 1983, the new requirements will stipulate that teachers must have completed a minimum of three years of post-secondary education, including one year of professional teacher education, in order to obtain the certificate. Teachers with degrees but no professional teacher education will be eligible for a certificate restricted to the subject area of their degree program.

During the 1981/82 academic year, evaluation teams of from three to six members, chaired by recently retired school superintendents, studied 34 independent schools. The teams were aided by recently retired directors of instruction who, acting as consultants, made pre-evaluation visits to secondary schools and also helped write some of the evaluation reports. The evaluations showed that the educational programs in the vast majority of independent schools were of high quality.

Transportation services to independent schools were the subject of an intense study, which took place from December, 1981 through April, 1982. As well, staff continued work on the Independent Schools Informational System, which was to become effective in the autumn of 1982.

Educational Finance Department

With "budget" and "restraint" among the words most frequently used by the government during 1981/82, the Educational Finance Department experienced an especially challenging year. The department developed a new funding system for schools, planned new budgeting systems for school districts, and produced a computerized analysis for every school district's budget. The department also designed models and simulations that would clarify the school financing options open to administrators, and generally reduced the dependency of Ministry financial decision-makers on outside agencies for budget analysis by improving the analytical capability of the internal system. The department also ameliorated the Ministry's capital financing and budgeting procedures, provided the Ministry of Finance with support work for the implementation of new finance systems, and performed exhaustive budget studies to bring education expenditures within the government's restraint guidelines.

Since school district and college and institute budgets are set by calendar year, whereas Ministry annual reports cover the July 1 - June 30 year, a precise breakdown of the savings effected by restraint up to June 30, 1982 would be meaningless. However, in calendar 1982 the restraint program reduced school budgets by $37.5 million and college and institute budgets by $8.5 million from earlier projections. During the spring of 1982, the department not only worked out a restraint budget for 1982, but also made restraint projections for 1983.

Apart from handling these specific tasks, the department represents the Ministry's financial interests in negotiations with other levels of government and educational agencies. A reorganization of the department in April 1982 created three divisions with separate areas of responsibility: the Division of the Ministry Comptroller, the Division of Educational Finance Research and Economic Analysis, and the Division of Budget Development and Analysis.

Division of Educational Finance Research and Economic Analysis

The Division of Educational Finance Research and Economic

Analysis was established in the summer of 1981 to improve the Ministry's ability to deal with questions of property taxation and school finance. In addition, the unit provides analyses of the economic and financial impacts of various alternative school funding policies.

In 1981/82, the unit's primary assignment was to provide analyses of the various means by which rapidly escalating property taxation could be brought under control. Studies of these means were undertaken early in 1982. The studies led to a series of simulations that showed the probable effects of each of the possible restraint programs.

The unit also played a key role in the implementation of the *Education (Interim) Finance Act* by providing decision-makers with financial simulations that showed the effects of the different options being considered by the government. It then collaborated with the Division of Schools Finance and Facilities in order to computerize the detailed calculations required to implement the new act.

In addition to conducting studies that meet the specific needs of Ministry decision-makers, the unit has been conducting an ongoing study of school finance systems in other Canadian provinces, the United States, and Great Britain. The study will discern how the most attractive features of the systems in place in these other jurisdictions might work if they were used in British Columbia.

Division of the Ministry Comptroller

The Division of the Ministry Comptroller develops and maintains internal financial reporting and control systems and has a particular mandate to provide Ministry managers with whatever up-to-date financial information they need to administer current operations and engage in planning. The division oversees Ministry accounts, the transfer of funds, and the maintenance of Ministry expenditure records; it also handles the Ministry's payroll, the Ministry's internal auditing, and the distribution of monthly financial management reports to Ministry managers responsible for budgets. In order to

perform these various tasks, the division maintains close ties with several Ministry of Finance branches, including the Comptroller General's office and Treasury Board, as well as with the Auditor General's office.

During 1981/82, this division helped develop a plan to implement policies arising from the new *Financial Administration Act*. From this plan, the Ministry produced a policy digest that became a model for all other provincial ministry digests. A new *Signing Authorities Manual* establishing procedures for spending and for obtaining payment authority that was issued this year by the division, also became recognized as a guide for other ministries. Over the course of the year, the Ministry Comptroller's Division completed one other publication, an administrative procedures manual for Ministry managers.

Overall, the division expanded somewhat in 1981/82. Late in the year, a new director of accounting, a director of auditing, and a co-ordinator of internal audit were appointed and plans to make the Internal Audit Unit fully operational were undertaken.

Division of Budget Development and Analysis

Formed in April 1982, this division inherited some of the functions of the former Financial Services Division. Its small staff of six (including two analysts) was given the task of using the latest in computer technology to analyse budgets forwarded by school districts and to develop overall budgets for the Ministry. The department also is responsible for helping Ministry managers with budget problems.

Immediately following its formation, the division was required to develop budgets conforming to the restraint guidelines announced less than two months previously. At the end of 1981/82, however, full staffing of the division was still incomplete because of fiscal restraint.

The first of the following tables allows a comparison of the growth in education expenditures for the last five years. The second, two-page table provides information on educational expenditures and sources of funding for 1981/82.

Growth in Expenditures

in $ millions	1977/78*	1978/79*	1979/80	1980/81	1981/82
Net Provincial Support to Education	749.8	817.1	877.6	1,013.4	1,172.4
Schools (Calendar Year)					
Operating	938.9	1,026.8	1,035.6	1,153.6	1,369.4
Capital	97.8	106.0	115.4	126.6	144.3
Total	1,036.7	1,132.8	1,151.0	1,280.2	1,513.7
Colleges and Institutes					
Operating	139.34	159.51	199.72	229.63	273.61
Capital	7.30	18.68	19.75	26.75	38.89
Total	146.64	178.19	219.47	256.38	312.50

*Estimates made using Ministry of Education, Science and Technology estimated expenditures and deducting funds for Universities, Science and Technology, Metric Conversion, and 59.8 per cent of Student Aid Programs.

Sources: Ministry of Education, Estimates Book, 1979/80; 1980/81; 1981/82
Ministry of Universities, Science and Technology, Estimates Book, 1977/78; 1978/79

Educational Expenditures an

Sources of Funding	in $ millions
School Districts	
Provincial Grants to Schools	$ 498.4
Provincial Homeowner Grant	228.5
Property Taxation	
Residential (net of Homeowner Grant)	185.9
Non-Residential	530.7
Miscellaneous Grants and Revenue Sources	70.1
Subtotal	$1,513.6
Colleges and Institutes	
Provincial Grants	
to Operating	$ 234.1
to Capital	38.9
Tuition Fees	23.6
Miscellaneous Revenues	15.9
Subtotal	$ 312.5
Grants from the Federal Government	$ 147.1
Recoveries for Public School Operations	1.5
Recoveries from other Provincial Ministries and Agencies	24.0
Provincial General Revenue Fund	198.5
Subtotal	$371.1
Total	$2,197.2

Sources: 1981 School Districts Composite Budget
Ministry of Education 1981/82 Estimates Book
B.C. Assessment Authority

Sources of Funding 1981/82

Gross Expenditures	in $ millions
School Districts	
Operating	$1,342.6
Capital	127.0
Non-Shareable Accounts	44.0
Subtotal	$1,513.6
Colleges and Institutes	
Operating	$ 273.6
Capital	38.9
Subtotal	$ 312.5
Homeowner Grants	$ 228.5
Teachers' Pension Fund	83.7
Student Aid Programs	5.7
International Year of Disabled Persons	2.8
Other Support Expenditures	50.4
Subtotal	$371.1
Total	$2,197.2

Management Operations Department

The Management Operations Department of the Ministry of Education was created in 1981 to ensure that a high level of professional services is provided to aid the Minister and his officials in managing the complex enterprise of public education in British Columbia.

Half of the province's population is involved in education as full-time or part-time students, teachers, or administrators. Modern management techniques are required to control billions of dollars in resources and provide the necessary accountability for the monumental task of serving the educational needs of the province.

The Management Operations Department is one of the four departments within the Ministry of Education. The other departments are the Schools Department, the Post-Secondary Department, and the Educational Finance Department.

Through its four divisions, Operations and Management Services, Policy and Legislative Services, Data and Information Services, and Administration Services, the Management Operations Department also has among its responsibilities the role of ensuring the necessary planning and support for effective liaison between the Ministry and other central agencies of Government, including Treasury Board, Government Employee Relations Bureau, the Public Service Commission, the B.C. Systems Corporation, B.C. Building Corporation, and Government Information Services.

In addition, the department has a management liaison responsibility to boards of trustees of 75 school districts and boards of 22 colleges and institutes, which are accountable to the Minister for the sound and effective management of school districts and educational institutions in their areas of responsibility, in accordance with the *School Act*, the *Colleges and Provincial Institutes Act*, and related legislation.

Division of Operations and Management Services

The Operations and Management Services Division of the

department, which incorporates the previously existing Personnel Branch and the Project Planning Centre, was established in 1981. Since then, its evolution has been circumscribed by financial restraints. There are two branches in the division: Management Services Branch and Personnel Services.

Management duties handled by the division are extensive and wide-ranging. However in 1981/82, the most important duty of division managers was to develop a funding and information system for school districts that can take effect once current restraints are removed. Also during 1981/82, the division developed management procedures for spending, payment, and personnel under the *Financial Administration Act*, played an important role in updating the word processing technology used in the Minister's office, studied the consolidation of Provincial Resource Centres, and planned the pending relocation of Ministry offices.

Management Services Branch

The Operations and Management Services Branch was created late in 1981, and its director appointed in February 1982. Full staffing for this branch has been delayed by budget restrictions. Nevertheless, in 1981/82 the branch studied management practices and the word processing system used by the Correspondence Education Branch and helped the Correspondence Education Branch managers make improvements that directly benefited its students. The changes speeded up delivery of lesson materials to correspondence students, reducing turnaround time from many weeks in some cases to a matter of days.

During the year, branch personnel also helped Ministry decision-makers formulate strategic plans and set objectives for the Ministry. The major ongoing task handled by the branch, however, was to develop a system for capital planning, budgeting, and project monitoring within the Ministry. Work on this project will continue in 1982/83.

Personnel Services Branch

During 1981/82, the Personnel Services Branch of the Division of Operations and Management Services

assumed a greater degree of responsibility for staff training and development than in the past, following the Public Service Commission's decision to assign the operational aspects of this function to individual ministries. The branch administered the selection process for posted Ministry jobs and provided general personnel management services. In 1981/82, it had the particular added responsibility of analysing and classifying those positions affected by reorganization in the Ministry and of reviewing general position classifications. The branch also operated a staff training plan that improved the management and word processing skills in the Ministry.

Project Planning Centre

The concept of a central project planning centre has aroused considerable interest in government circles, and seminars on the Ministry of Education's centre have attracted staff from other ministries and Crown Corporations. Several of these interested groups have begun centres modelled on the Project Planning Centre.

What the centre does is to provide managers working on a wide range of Ministry projects with access to the expertise, tools and techniques they need to plan and monitor their initiatives. It has helped those involved in such projects to meet their objectives within budget and on time. Between 20 and 30 projects are managed by the centre at any one time. Among them in 1981/82 were the Career Preparation Project, CHOICES, the Schools Project, the Teacher and Timetable Statistics System, the Correspondence Education Branch Management Study, the Computer Transcription of Braille Project, the Student Aid Project, the Staff Training and Development Project, the Financial Administration Act Implementation Project, and the Resources Centre Study.

During the year, the Project Planning Centre also assumed responsibility for important tasks such as procurement of new Ministry photocopiers and administration of the Ministry's mail service. Most of the old copiers were replaced, improving service and reducing costs. In addition, the centre prepared several discussion papers and administered project budgets and contracts for project consultants.

Division of Policy and Legislative Services

1981/82 was a year of significant changes in school legislation. In this year, when government finances became an increasingly pressing issue, the Division of Policy and Legislative Services contributed to the creation of the *Education (Interim) Finance Act*, proclaimed in April, 1982. As part of a transition from the old *School Act* to a thoroughly revised *School Act*, the *Education (Interim) Finance Act* changes or suspends sections of the *School Act* pertaining to school operating budgets. It also assigns residential property taxes to the school districts and non-residential property taxes to the Provincial Government for equitable distribution throughout British Columbia.

To prepare for the thoroughly revised *School Act*, the division also developed a mandate paper on educational goals. A White Paper with the text of the proposed revisions is planned for release in 1983 to provide an opportunity for public study and consultation before the revised *School Act* is placed before the Legislature. The major thrust of this paper on educational goals is toward maintaining a high-quality educational system and funding that system by means of a fair and well-balanced system of taxation and provincial grants at a time when government finances are stringently controlled.

In the course of the year, the division also consolidated many of the old *School Act* regulations. As well, it drew up an amendment (not enacted during 1981/82) to allow school boards to acquire property beyond their boundaries for curriculum-related outdoor studies and clarified legislation that prohibits persons ordered from school premises from returning without permission.

One of the division's most progressive undertakings was to put in place a sophisticated legal and policy referral service. The undertaking involved codifying and storing on word processing disks the various acts, orders-in-council, administrative circulars, and court judgments affecting education. As a parallel undertaking, the division published a *Manual of School Law* on legislation pertaining to the province's public schools and prepared a similar manual

for release in the autumn of 1982 on legislation pertaining to post-secondary institutions.

Division of Data and Information Services

This year was the first full year in which the Division of Data and Information Services served as a part of the Department of Management Operations, and the year was a busy one for the division. Policies and procedures were implemented for funding current, automated data systems and for developing new ones. Policies and procedures that would enable school districts to apply for capital cost-sharing with the Ministry when developing their own computerized administrative support systems were also implemented. Within the Ministry itself, formerly centralized data-processing budgets were reallocated to individual users, and a charge-back system was instituted to give Ministry managers greater control over and responsibility for their data processing.

The division strengthened its communication ties with data service users by forming a data systems users group and an advisory committee of district superintendents. The users group will ensure that the division remains responsive to user needs and will anticipate future user needs, while the advisory committee will consider ways to streamline data and information activities.

Meanwhile, seven major systems development projects were completed. A comprehensive methodology was implemented to monitor user satisfaction and the cost-effectiveness of the Ministry's data processing systems. A Ministry-wide computer data security system was also instituted. The division produced an information and public relations program to explain the changes in the public school funding legislation, which took place in the spring of 1982. To explain these and other Ministry legislative activities related to the public sector restraint program, the division also co-ordinated the dissemination of information to members of the educational community and the public.

Data Services Branch

The Data Services Branch implemented the STATS system (School, Teacher, and Timetable System), which replaced Forms I (September Enrolment), J (Teachers), K (Course Organization), Minority Language, and June I (June Enrolment). In addition to implementing the subsystems for core enrolment and teacher programs in the STATS system, the branch developed subsystems for special education data, schools finance data, and independent schools data. Overall, more than 120,000 records were processed into the STATS system during 1981/82. The system provided better quality control and more timely reporting, as most manual edits were replaced by computer checks, and reports were all computer-produced.

Systems appraisals (used to determine the feasibility and cost-effectiveness of proposed systems) were completed by the Data Services Branch to computerize Braille textbooks, provide on-line access to data banks for the Ministry Library, and develop an assets inventory system for the Ministry.

Another function of the branch is to review requests from Ministry branches for computer hardware (including microcomputers) and determine whether the equipment acquisition represents the most cost-effective alternative for the branch. Such reviews were done for Publication Services, which requested an extra disk pack for its minicomputer, for Correspondence Branch, which requested remote terminals, for PEMC, which requested an optical reader, and for the Provincial Resources Centre, which requested a microcomputer.

A major undertaking was to develop a comprehensive evaluation methodology to review the effectiveness and efficiency of the Ministry's computer systems. The systems evaluated in 1981/82 included STATS, the Publication Services Textbook Inventory System, the Special Programs Special Education Data System, the Schools Facilities Inventory System, the Post-Secondary Faculty Workload and Enrolment Systems, and the Internal Financial Management Report System. These evaluations provided the basis for identifying inefficiencies

and for recommending enhancements or redevelopment of the systems.

As well, a data dictionary was started in order to catalogue all automated data available in the Ministry, and a data security system was implemented to ensure the integrity and safety of Ministry data.

Information Services Branch

In carrying out its function of handling communications with the professional education community and the public, the Information Services Branch in 1981/82 issued 134 news releases, responded to some 2,500 written or telephoned requests for information, mounted displays of educational material, and produced several publications of various kinds. Among the latter were *Education Today* (a tabloid newspaper distributed to 37,000 teachers in schools and post-secondary institutions), *Bonus* (the internal staff newsletter), a directory of administrative personnel in education throughout the province, discussion papers, the annual list of all schools by school district, and a new directory of Ministry of Education services.

Throughout the year the branch's most intensive efforts were devoted to informing professional educators and administrators, boards of school trustees, and media representatives about the operational details and the significance of two of the Ministry's major initiatives: the public sector restraint program as it applied to education and the revision of the education finance formula. This involved preparing explanatory documents for school districts and post-secondary institutions, writing news releases, and publishing a special issue of *Education Today* to ensure that the information reached classroom teachers as well as senior administrators.

The Ministry's 1981 exhibit at the Pacific National Exhibition presented a particularly interesting opportunity for the branch. In co-operation with the Occupational Training Council and the British Columbia Systems Corporation, the branch installed four microcomputers to enable fairgoers to test themselves on CHOICES, the computerized

career selection program that assists individuals in determining the type of work for which they are best suited. The booth attracted many thousands of people who were able to familiarize themselves with a career guidance service now being provided to an increasing number of schools.

During the year, the issuance of Circulars was also assigned to the Information Services Branch. The branch put out Schools Department Circulars, used to convey formal statements of Ministry initiatives on program and policy matters to the field, and Announcements Circulars, used to communicate informational items that do not involve policy or program initiatives.

Ministry Library

During 1981/82, staff at the Ministry Library completed the job of cataloguing the government document collection. At the same time, responding to an increasing number of requests from Ministry personnel for timely information on education finance and administration, the staff undertook an extensive review of the library's collection and services. Individual needs assessment studies were conducted among regular and new users to ascertain where library services could be strengthened. As a result of the studies, a number of improved programs were introduced (including the development of user profiles to provide more relevant services) and the reference collection was expanded to reflect the growing interest in microcomputer technology.

A regular reprint service, bringing together recent articles of topical interest, was introduced to provide Ministry staff members and school district superintendents with up-to-date information on new developments in education. Also, because an increasing number of requests for information on professional development were received from teachers in the more isolated areas of British Columbia, a number of new systems were set up.

Special Report

Education (Interim) Finance Act

If there was one project that dominated and perhaps symbolized Ministry of Education activities in 1981/82, it was the development of the *Education (Interim) Finance Act*, passed by the Legislature in April 1982. This act was doubly important — both in itself and as a transition to an entirely new *School Act*.

The roots of the act go back to early 1980 when education taxation became a highly charged public issue. The school property taxation system had been established in less economically volatile days, when inflation was a minor factor and it was assumed that property assessments and school costs would rise slowly and more or less uniformly across the province. These assumptions collapsed in the wake of rapid increases in education expenditures and the explosive rise in real estate prices (especially in the Lower Mainland and southern Vancouver Island) that began in 1980 and continued through the spring of 1981. The result was a rapidly escalating budget for education and a school tax burden disproportionately tilted onto residential property owners in some districts while leaving others lightly taxed or even untaxed.

Early in 1980 the government struck a committee to study school taxation, consisting of J.R. Fleming, Assistant Deputy Minister of Educational Finance, and Peter Adams, Director of the Tax and Fiscal Policy Branch, Ministry of Finance, assisted by three researchers. By September the group produced the *School Taxation Report*, which exhaustively explored the subject and offered a range of taxation and funding choices to the government. The Ministry meanwhile established the Division of Educational Finance Research and Economic Analysis, which was fully staffed by September, 1981.

The small research group's job was formidably complex, but it soon developed the capability of showing the impact of every imaginable tax change, district by district, throughout British Columbia.

The finance formula chosen by the government, released only a few weeks after Premier Bill Bennett's

announcement of the Restraint on Government Spending Program on February 18, 1982, was embodied in the *Education (Interim) Finance Act* prepared by the Policy and Legislative Services Division led by executive director John Walsh.

The new taxation system fundamentally changes the way our schools are financed. The contentious provincial basic levy, under which some school tax money was shifted from districts where assessments had soared to districts where assessments had barely risen, was scrapped. Under the new system, school districts tax residential property for local school purposes only, and all the money so raised stays within the district. The provincial government taxes non-residential property (industrial, commercial, and six other classes) for school purposes on a province-wide basis as a resource for all British Columbia children, regardless of whether they live in "industry-rich" or "industry-poor" school districts.

There are other important provisions of the *Education (Interim) Finance Act*, including school district budget measures required by the government restraint program. As the name indicates, however, the act is not a permanent one. It expires on December 31, 1984, when a new *School Act* — to be released in draft form for public study and discussion in 1983 — will supersede it.

Post-Secondary Councils

Three councils allocate funds to British Columbia's colleges and institutes and advise the Ministry on post-secondary (excluding university) educational matters that fall outside of university governance. They are the Academic Council, the Occupational Training Council, and the Management Advisory Council.

Academic Council

The Academic Council administers academic university transfer programs, career-oriented technical programs, and certain vocational programs in the colleges and institutes. It studies budget submissions and program proposals from the institutions, advises the Minister on these proposals, and distributes the funds.

The Council's policy is to encourage the individuality of each institution within an overall framework of provincial needs and means. In 1981/82, it determined certain key programs as provincial education priorities. Four advisory committees of the Academic Council — on health, recreation, computer, and the fine arts — form an important link between the educators and the employers of graduates.

Occupational Training Council

The Occupational Training Council administers occupational training programs in much the same way as the Academic Council administers academic programs.

During 1981/82, the CHOICES program was expanded to 72 sites across the province. CHOICES is a computerized system using video display terminals to provide students with detailed information on employment possibilities. About 400 secondary and post-secondary counsellors have been trained to operate the system, and an average of 1,500 students use it each week. An exhaustive evaluation of the CHOICES program was scheduled for the autumn of 1982, with a December deadline for submission of a report to the Deputy Minister.

Through the Industry Consultative Committee, the Council continued to maintain its close relationship with the Provincial Apprenticeship Board, the Canada Employment and Immigration Commission, and industry (management and union).

Management Advisory Council

The Management Advisory Council advises the Minister on capital facilities expenditures and on matters not assigned to either the Academic Council, the Occupational Training Council, or the Ministry Standing Committee.

During 1981/82, development of the criteria for evaluating student support services in the colleges and institutes was continued. A comprehensive study of the five-year educational planning system, commissioned by the Council, was received in May 1981, and plans were made to implement its recommendations. The Council also prepared capital development proposals under the third Five-Year Capital Facilities Plan.

As well, the Council jointly sponsored a special conference on libraries, with the Universities Council. This conference was supported by the Ministry of Education, the Ministry of Universities, Science and Communications, and the Provincial Secretary's Library Services Branch. The conference examined the present system of library service resource-sharing throughout the province and the possibilities for extending the network.

Post-Secondary Department

The Post-Secondary Department is responsible for allocating funds to 22 of the province's colleges and institutes and for overseeing the administration of those colleges and institutes. It has specific responsibility for apprenticeship programs, student aid, and adult education. While retaining close ties with federal and provincial agencies, this department also carries out the mandate of the Ministry of Education abroad: during this past year, for instance, it completed its involvement in a technical training project in Indonesia.

There are four divisions in this department: the Division of Post-Secondary Facilities and Operations, the Division of Continuing Education, the Division of Management Services, and the Division of Program Services.

Division of Post-Secondary Facilities and Operations

1981/82 was the second year of existence for the newly amalgamated Division of Post-Secondary Facilities and Operations. As was anticipated, amalgamation of the formerly separate Facilities and Operations branches has led to improved efficiency through simplification of approval and funding procedures and a streamlining of the various other processes in which the branches are involved. Essentially, the responsibility of this division is to ensure that appropriate, cost-effective facilities are available when needed to house programs that have been approved by other divisions of the Post-Secondary Department.

While the division's main task is to facilitate implementation of a finalized program, it can become involved at a very early stage of program planning thanks to its new (two-year old) computerized systems for taking inventory and keeping track of the way space is used. The data from these systems allows other post-secondary divisions to take space availability and utilization factors into account when they are making difficult decisions on program approvals and allocation. Although the inventory and utilization systems do not establish absolute standards, they do provide contexts within which the real need for additional space can be rationally discussed. This input takes on even greater significance during times of restraint when it is

important to avoid duplication of facilities when existing space is not fully utilized.

Post-Secondary Facilities Planning Branch

During the year, several major projects approved in previous years came on stream, providing an additional 43,000 square metres of space in the post-secondary education system. This space has helped to reduce overcrowding in certain areas and has upgraded the quality of space provided in other areas. At the same time, the branch has made possible the release of leased space that was of marginal value.

Midway through the year, economic circumstances forced a review of all government capital expenditures, and there was a consequent slowdown in project approvals. Nonetheless, expenditures of $32 million were approved in the year. These permitted the start of eight major projects and made possible renovations, public works programs, and major equipment purchases.

Post-Secondary Operations Branch

During 1981/82 the Post-Secondary Operations Branch further refined and expanded its word-processor control files to give the Ministry more effective control over the process of distributing and verifying operating capital grants to colleges and institutes. The improved files also enable the Ministry to respond more quickly to feedback from the colleges and the institutes on the subject of grants. Overall, these grants were up 21.9 per cent from the previous year.

The Vocational Cost System, involving $44.5 million in revenues from Canada Employment and Immigration, continues to be administered by the branch. Progress was made during the year in improving the co-ordination of the branch's efforts with those of the Office of the Comptroller General and the Ministry of Labour in the processing of claims. However, more work needs to be done in speeding up the process.

The branch also assisted with budget analyses conducted by

the Management Advisory Council and the Ministry Standing Committee which, together with the Academic and Occupational Training Councils, are responsible for reviewing college and institute budgets and making recommendations on modification or acceptance.

Division of Continuing Education

As befitted the International Year of Disabled Persons, special education had a particularly high profile in 1981. During the year, the Division of Continuing Education made major additions to *Alternative Route*, its curriculum materials package for mentally disabled adults, which has become widely used in the province and across Canada since it was first developed in 1978. The division also undertook new initiatives, publishing *Issues and Insights*, a descriptive manual that will help educators and other interested persons to understand the needs of the handicapped in such areas as employment, housing and transportation.

Family learning was also a high priority for this division in 1981/82. Inspired by a provincial conference co-sponsored by the B.C. Council for the Family, the division focussed on the educational needs of foster parents. It co-operated with the Ministry of Human Resources and the B.C. Federation of Foster Parents to produce a study of foster parent skills and a preliminary inventory of learning resources available for training foster parents. The Division of Continuing Education plans to use the Knowledge Network's services for such training.

Among the kits, manuals, and other materials produced by the division this year were *Introduction to Teaching Adults*, *The Adult Education Handbook*, *Getting to Know Your Community*, and the third annual edition of *The Continuing Education Data Booklet*. *The Continuing Education Programmer's Manual*, which provides a description of the job skills and basic entry-level information for those operating community adult education activities, has proven very popular since its publication in 1980/81.

The demand for adult basic education and English language training continued to increase in 1981/82. An ABE student assistance program was established, and two

important curriculum resources were produced: *ESL for Adults: English for Work* and *The ABE English & Communications Curriculum Guide.*

Division of Management Services

The Division of Management Services consists of three branches: Policy and Planning, Trades and Industrial Training, and Institutional Support Services. Among its other functions, this division allocates capital and operating budgets to the colleges, institutes, and the three governing councils of the post-secondary system. It also administers student aid programs and provides vocational training plans, such as those covered by B.C.'s portion of Canada's Manpower Training Program. This year, the division's Manpower Training Section received $44.5 million from the Canadian Employment and Immigration Commission and played a more important role in the program than ever before. In conjunction with other ministries and the federal government, it provided B.C. students with up-to-date information on the labour market and improved their opportunities to increase their vocational skills. For their part, division administrators helped to ensure the future of the program by participating actively in the renegotiation of the Federal-Provincial Training Agreement, which was renewed on March 31, 1982.

Policy and Planning Branch

The mandate of this branch was changed in 1981/82 from one that limited the branch to handling short or medium-term budgeting, to an integrated mandate that would involve the branch in evaluating the budgets and capital commitments of the various educational facilities, and in helping the administrators of these facilities make long-term plans. With this change, the branch will now play a major role in mapping the future of post-secondary educational facilities.

In recent years, 14 of the province's colleges and institutes responded to an invitation to submit five-year plans outlining their general educational goals. The branch analysed these plans, and during 1981/82 asked the colleges and institutes to revise their goals to meet more specifically the

needs of the times: to make post-secondary education accessible to more students, to pay increased attention to the practical requirements of the jobs for which students are training, and to take more account of the need for a balanced social development within the communities in which post-secondary institutions are located — all this within the guidelines of financial restraint. The intent of this response was to help the colleges and institutes produce more sharply defined goals and achieve a better sense of direction. The continuing effort to help the colleges and institutes in this way was well illustrated by the release at the end of the fiscal year of the draft planning document, *Integrated Five-Year Planning for the British Columbia College and Institute System: System Objectives 1982/87.* At the same time, the branch was analysing and compiling proposed amendments to the legislation governing colleges and institutes, thus contributing to the guidelines for institutional by-laws that were issued by the Minister in September, 1981.

Institutional Support Services

This branch, using a new computer system to speed up grant and loan allocations, processed about 14,000 student applications for provincial grants in 1981/82. During the year, the maximum grant was increased from $1,700 to $2,000 for single students, to $2,400 for married students, and to $2,400 for students who are single parents. This grant is usually made in addition to a student loan, which this year had a value of $1,800, unchanged from previous years.

Also this year (January, 1982), after consulting extensively with administrators of the colleges and institutes, the Institutional Support Services Branch announced a modified zero-based budgeting system for colleges and institutions. This modified budgeting system is to become effective in 1983/84.

Trades and Industrial Training Branch

This branch co-operates with the British Columbia Ministry of Labour to further the expansion of the province's apprenticeship system. Under the system, apprentices return to school for a period of four to eight weeks during

each year of their apprenticeship. In 1981/82, the system provided 18,900 full-time apprentices with 969 apprentice classes — 14 per cent more than the record 847 classes in the previous year.

To meet the increasing demand for upgraded employee skills, this branch encourages employers to see the long-term benefits involved in improving their employees' skills and to participate with Canada Employment and Immigration in a program of shared wage and training costs. In addition, industrial training consultants from the colleges and institutes help employers develop training plans and bring representatives from industry and the post-secondary institutions together to initiate and improve training programs.

Division of Program Services

The effects of the global recession on provincial revenues and budgets imposed a heavy burden on this division in 1981/82. Its officials were deeply concerned with the effects on newly graduated high school students of the curtailment of first and second-year college programs. They accordingly joined with officials from the Ministry of Universities, Science and Technology in a study of the impact of budget restraint on colleges and universities. This study resulted in the adoption of a more rational and equitable approach to program reductions that lessened students' difficulties.

Also in 1981/82, a revolutionary change took place in the Ministry of Education's approach to skills training. Under the old system, there were two entry-level programs for students: pre-apprenticeship and pre-employment. This year, in one of the most significant Ministry initiatives, the government decided to end the pre-apprenticeship program. Effective January 1, 1983, there will be a single competency-based system that is provincially standardized and accredited and will provide for total portability of courses.

Under the new system, the semester approach will be abandoned in favor of a continuous intake/exit system: a student will join classes when space is available, proceed at an individually appropriate pace rather than at a speed

pre-determined for the whole class, and complete the course when his or her competence has been established. This approach, combining the competency criteria with flexibility of scheduling, is expected to be much better than the conventional system.

Vocational Programs

In the area of Vocational Programs, the Program Services Division completed one of the Ministry's most imaginative projects in 1981/82, training instructors for a new forestry school at Samarinda on the coast of Borneo, Indonesia. Under a contract with the Canadian International Development Agency, nine British Columbia forestry experts from both private industry and the provincial colleges helped Indonesian teachers set up a technical training school to teach hardwood forest logging and transport, along with the supporting trades.

The Ministry provided technical services under a $1.5 million contract on behalf of CIDA. Much of the $2 million provided by a CIDA 50-year loan to establish the school was spent on equipment orders placed through British Columbia suppliers.

Back at home, the Instructor Diploma Program for college and institute instructors continued to grow. In 1981/82, more than 800 instructors took education training under the program, which is offered under contract by the University of British Columbia. The division also provides instructor skills workshops throughout the province.

Academic/Technical Programs

In the area of Academic/Technical Programs, a number of new programs were approved for inauguration in September 1982, inspired largely by the May 1981 *Task Force Report on Technological Training in Engineering, Health, Science, and Related Fields*. Computer science is the most prominent among the new programs. In addition, office training and post-basic nursing programs were expanded. There was relatively little growth during the year in fine arts, humanities, and university transfer programs because of financial restraints.

The Academic/Technical Branch's major curriculum projects in 1981/82 included development of a number of computer simulations that can be used as instructional tools that will lead to a certificate for process operators. This would be attractive to many private industry employees in a wide variety of enterprises who could increase their skills while remaining at work.

Research and Curriculum Development Branch

During the past year, the Research and Curriculum Development Branch of the Program Services Branch launched the *Vocational Follow-Up System*, which proved to be an outstanding informational tool for the Ministry. The Branch produced a questionnaire that, with the co-operation of the colleges and institutes, was sent to about 11,000 former students three months after their graduation. A remarkable number (some 6,700) responded. The questionnaire elicited important information from the graduates about their employment, how their training related to their jobs, and what improvements they felt could be made in the programs they had taken, in light of their work experience.

College Regions and School Districts

College and Main Campus:	School Districts included in College Region:
CAMOSUN COLLEGE Victoria	61, 62, 63, 64
CAPILANO COLLEGE North Vancouver	44, 45, 46, 48
CARIBOO COLLEGE Kamloops	24, 26, 27, 29, 30, 31
COLLEGE OF NEW CALEDONIA Prince George	55, 56, 57, 28
DOUGLAS COLLEGE New Westminster	40, 41, 42, 43
EAST KOOTENAY COMMUNITY COLLEGE Cranbrook	1, 2, 3, 4, 18, 1/2 of 86, (South of Sanka Creek)
FRASER VALLEY COLLEGE Chilliwack	32, 33, 34, 75, 76
KWANTLEN COLLEGE Surrey	35, 36, 37, 38
MALASPINA COLLEGE Nanaimo	65, 66, 68, 69, 47
NORTH ISLAND COLLEGE Comox	70, 71, 72, 84, 85, 49
NORTHERN LIGHTS COLLEGE Dawson Creek	59, 81, 87, 60
NORTHWEST COMMUNITY COLLEGE Terrace	50, 52, 54, 80, 88, 92
OKANAGAN COLLEGE Kelowna	14, 15, 16, 19, 21, 17, 22, 23, 77, 89
SELKIRK COLLEGE Castlegar	7, 9, 10, 11, 12, 13, 1/2 of 86 (North of Sanka Creek)
VANCOUVER COMMUNITY COLLEGE Vancouver	39, 38, 41

87
81
80
NORTHERN LIGHTS COLLEGE
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92
50
NORTHWEST COMMUNITY COLLEGE
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COLLEGE OF NEW CALEDONIA
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CARIBOO COLLEGE
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NORTH ISLAND COLLEGE
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OKANAGAN COLLEGE
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CAPILANO COLLEGE
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EAST KOOTENAY COMMUNITY COLLEGE
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44
78
32
23
22
10
6
FRASER VALLEY COLLEGE
43
31
17
77
15
7
MALASPINA COLLEGE
68
75
33
16
14
13
12
9
11
3
2
66
1
62
63
40
41
DOUGLAS COLLEGE
KWANTLEN COLLEGE
61
VANCOUVER COMMUNITY COLLEGE
CAMOSUN COLLEGE

Statistical Tables

Statistical tables, including data that corresponds to activities of the Ministry of Education as described in this report, have been published under separate cover and are available upon request from the Data Services Branch, Ministry of Education, Parliament Buildings, Victoria, B.C. V8V 1X4